(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 12 May 2005 (12.05.2005)

PCT

(10) International Publication Number WO 2005/042076 A1

(51) International Patent Classification⁷: A61M 15/00

(21) International Application Number:

PCT/GB2004/002315

(22) International Filing Date: 1 June 200

1 June 2004 (01.06.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0324278.1 16 October 2003 (16.10.2003)

(71) Applicant (for all designated States except US): BESPAK plc [GB/GB]; Bergen Way, North Lynn Industrial Estate, King's Lynn Norfolk PE30 2JJ (GB).

- (72) Inventors; and
- (75) Inventors/Applicants (for US only): BELL, Phillip [US/US]; 5404 Deer Hill Court, Raleigh, NC 27617 (US). POPOW, John [US/US]; 214 Clearport Drive, Cary, NC 27519 (US).
- (74) Agents: THOMSON, Neil, David et al.; Boult Wade Tennant, Verulam Gardens, 70 Gray's Inn Road, London WC1X 8BT (GB).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

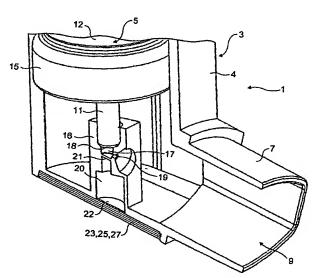
- of inventorship (Rule 4.17(iv)) for US only

Published:

- with international search report

[Continued on next page]

(54) Title: DISPENSING APPARATUS



(57) Abstract: A dispenser (1) comprising a housing (3), a pressure sensor (22), processing means (23) and a display means (27), the housing being shaped for receiving, in use, a dispensing container (5) of the type containing medicament and having valve means for dispensing the medicament in metered volume doses, wherein, in use, the pressure sensor is capable of detecting a pressure signature produced on dispensation of medicament from the dispensing container, wherein the pressure sensor is operatively connected to the processing means for relaying signals indicative of the pressure signature for processing by the processing means, the processing means being programmed to analyse said signals and compare said signals against one or more data sets containing data indicative of one or more control pressure signatures, the processing means being programmed to use a result of said comparison to detect the quantity of medicament dispensed compared to an intended volume of the metered dose volume.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.